

CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A method of presenting an interactive multimedia book on a computer
2 system comprising the steps of:
3 recognizing voiced commands spoken by a user of the book;
4 responding to a voiced command to read text on a displayed page
5 of the book by reading text on the displayed page of the book;
6 identifying words which are active hyperlinks in the text on a
7 displayed page of the book as the text is being read;
8 activating at least one attribute of a word identified as an active
9 hyperlink to indicate to the user of the book that the word is a hyperlink;
10 recognizing a voiced word spoken by the user of the book as an
11 active hyperlink; and
12 responding to a voiced word which is an active hyperlink by
13 moving to another page of the book which contains an anchor for the
14 hyperlink.
- 1 2. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, further comprising the steps of:
3 displaying an icon representative of a video clip on the page of the
4 book which contains an anchor for the hyperlink;
5 recognizing a voiced command to play the video clip; and
6 responding to the voiced command to play the video clip by
7 playing the video clip.
- 1 3. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 2, further comprising the step of:
3 providing a user interface which allows the user to pause, resume

4 and stop the playing of the video clip;
5 responding to a user input to pause the video clip by temporarily
6 halting the playing of the video clip;
7 responding to a user input to resume playing the video clip by
8 playing the video clip from a point at which the video clip was temporarily
9 halted; and
10 responding to a user input to stop playing the video clip by
11 stopping the playing of the video clip and returning to a main program.

1 4. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 3, wherein the step of providing a user interface is
3 by means of a single button which when pressed once pauses the playing
4 of the video clip if the video clip is playing, when pressed again resumes
5 the playing of the video clip if the video clip is temporarily halted, and
6 when pressed twice in succession causes the playing of the video clip to be
7 stopped.

1 5. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, wherein said at least one attribute of a word
3 identified as an active hyperlink is a change in color, the word on the
4 displayed page changing color when read.

1 6. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, wherein said at least one attribute of a word
3 identified as an active hyperlink is a sound, the sound being emitted when
4 the word on the displayed page is read.

1 7. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, wherein said at least one attribute of a word
3 identified as an active hyperlink is a change in color and a sound, the
4 sound being emitted and the word on the displayed page changing color

5 when read.

1 8. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, wherein the voiced commands spoken by the
3 user of the book further include a command to list active hyperlinks on a
4 displayed page.

1 9. The method of presenting an interactive multimedia book on a computer
2 system recited in claim 1, wherein the voiced commands spoken by the
3 user of the book further include a command to display an image of a
4 completed project described on a currently displayed page of the book.

1 10. A method of presenting an interactive multimedia book on a computer
2 system comprising the steps of:
3 recognizing a voiced word spoken by the user of the book as an
4 active hyperlink;
5 responding to a voiced word which is an active hyperlink by first
6 storing a current page number in a last in, first out register before moving
7 to another page of the book which contains an anchor for the hyperlink, the
8 current page being an origin page, and then moving to another page of the
9 book which contains an anchor for the hyperlink;
10 recognizing a voiced command spoken by the user of the book to
11 return to the origin page; and
12 responding to the voiced command to return to the origin page by
13 moving back to the origin page.

1 11. The method of presenting an interactive multimedia book on a
2 computer system recited in claim 10, further comprising the steps of:
3 recognizing a natural language query spoken by the user of the
4 book;
5 analyzing the natural language query; and

6 responding to the natural language query.

1 12. The method of presenting an interactive multimedia book on a
2 computer system recited in claim 11, wherein the natural language query
3 includes "WHAT", the step of analyzing the natural language query
4 analyzing a word or words following the word "WHAT", and the step of
5 responding to the natural language query includes the steps of displaying
6 and speaking a definition of the word or words following the word
7 "WHAT".

1 13. The method of presenting an interactive multimedia book on a
2 computer system recited in claim 11, wherein the natural language query
3 includes "MAKE", the step of analyzing the natural language query
4 analyzing a word or words following the word "MAKE", and the step of
5 responding to the natural language query includes the step of moving to a
6 section of the book which covers a project or recipe corresponding to the
7 word or words following the word "MAKE".

1 14. The method of presenting an interactive multimedia book on a
2 computer system recited in claim 11, wherein the natural language query
3 includes "HOW", the step of analyzing the natural language query
4 analyzing a word or words following the word "HOW", and the step of
5 responding to the natural language query includes the step of moving to a
6 section of the book which covers a technique corresponding to the word or
7 words following the word "HOW".

1 15. The method of presenting an interactive multimedia book on a
2 computer system recited in claim 11, wherein the natural language query
3 includes "GO", the step of analyzing the natural language query analyzing
4 a word or words following the word "GO", and the step of responding to
5 the natural language query includes the step of moving to a page, a section

6 of the book which covers a project or recipe or a technique corresponding
7 to the word or words following the word "GO".

1 16. A computer system comprising:
2 a system unit having a generally rectangular shape;
3 a display hinged at one edge of the system unit, said display being
4 rotated away from the system unit when the computer system is in
5 operation and rotated against the system unit when the computer system is
6 not in operation;
7 detecting means associated with the display for detecting when a
8 user wants to operate the computer system and when the user wants turn
9 the computer system off; and
10 an automatic on and off function implemented on the computer
11 system and responsive to said detecting means for turning on said
12 computer system and performing an initial program load of an operating
13 system installed on the computer system when the display is rotated away
14 from the system unit and for initiating a shut down procedure of any open
15 applications and the operating system when the display is rotated against
16 the system unit.

1 17. The computer system recited in claim 16, wherein the computer system
2 may optionally be placed on a horizontal work surface or mounted under a
3 cabinet or shelf, the computer system further comprising orientation means
4 for detecting an orientation of the computer system as either on a
5 horizontal work surface or mounted under a cabinet or shelf, said
6 automatic on and off function being further responsive to said orientation
7 means for rotating display information to the display during the initial
8 program load of the operating system so that a displayed image is oriented
9 right side up.

1 18. The computer system recited in claim 16, wherein the detecting means

2 detects a position of the display as either rotated away from the system
3 unit, indicating that the computer system is to be turned on, or rotated
4 against the system unit, indicating that the computer system is to be turned
5 off.

1 19. The computer system recited in claim 16, wherein the display is hinged
2 along a front edge of the system unit.

1 20. The computer system recited in claim 19, further comprising a
2 protective cover hinged along a back edge of the computer system, the
3 protective cover being rotated to cover and protect the display when the
4 display is rotated against the system unit and rotated away from the system
5 unit to allow the display to be rotated away from the system unit.

1 21. The computer system recited in claim 20, wherein the detecting means
2 is actuated by movement of the protective cover.

1 22. The computer system recited in claim 21, wherein the computer system
2 may optionally be placed on a horizontal work surface or mounted under a
3 cabinet or shelf, the computer system further comprising orientation means
4 for detecting an orientation of the computer system as either on a
5 horizontal work surface or mounted under a cabinet or shelf, said
6 automatic on and off function being further responsive to said orientation
7 means for rotating display information to the flat panel display during the
8 initial program load of the operating system so that a displayed image is
9 oriented right side up.

1 23. The computer system recited in claim 16, further comprising a single
2 user interface button on a front surface of the system unit, the user
3 interface button allowing a user to control functions of software running on
4 the computer system by a combination of single and double presses of the

5 user interface button.

1 24. The computer system recited in claim 23, wherein the software
2 includes a multimedia presentation and the single and double presses of the
3 user interface button control pause, resume and stop functions of the
4 multimedia presentation.

1 25. The computer system recited in claim 23, wherein the software
2 presents a user with choices for making a selection in a displayed image on
3 the display and the single and double presses of the user interface button
4 control movement among the displayed choices and selection of one of the
5 displayed choices.

1 26. The computer system recited in claim 23, further comprising a slot on
2 the front face of the computer system for receiving computer readable
3 media and an eject button for ejecting computer readable media currently
4 in the slot.

1 27. The computer system recited in claim 16, further comprising:
2 an internal microphone and an internal speaker providing a audible
3 interface with a user;
4 a wireless headphone and microphone set providing an alternative
5 audible interface with the user;
6 a wireless transceiver attachable to the computer system and
7 communicating with the wireless headphone and microphone set; and
8 means in the computer system for detecting attachment of the
9 wireless transceiver to the computer system and inhibiting operation of the
internal microphone and internal speaker.

1 28. A computer system for presenting an interactive multimedia book to a
2 user comprising:

3 a display for displaying text and video clips of the interactive
4 multimedia book, some words of the text being hyperlinks to anchors in
5 text not currently displayed;
6 a voice recognition function installed on the computer system;
7 a speech synthesis function installed on the computer system;
8 a microphone for inputting voiced commands by the user to the
9 voice recognition function;
10 at least one speaker for outputting synthesized speech from the
11 speech synthesis function; and
12 an application program running on a central processing unit of the
13 computer system for responding to a voiced command recognized by the
14 voice recognition function to read text on a displayed page of the
15 interactive multimedia book by causing the speech synthesis function to
16 read the text, the application program identifying words which are active
17 hyperlinks in the text on a displayed page as the text is being read and
18 activating at least one attribute of a word identified as an active hyperlink
19 to indicate to the user of the book that the word is a hyperlink, the
20 application responding to a voiced hyperlink recognized by the voice
21 recognition function by moving to another page of the book which contains
22 an anchor for the hyperlink.

1 29. The computer system recited in claim 28, wherein the application
2 program displays an icon representative of a video clip on the page of the
3 book which contains an anchor for the hyperlink, the application program
4 responding to a voiced command recognized by the voice recognition
5 function to play the video clip by playing the video clip.

1 30. The computer system recited in claim 29, further comprising a user
2 interface which allows a user to pause, resume and stop the playing of the
3 video clip, the application program responding to a user input to pause the
4 video clip by temporarily halting the playing of the video clip, responding

5 to a user input to resume playing the video clip by playing the video clip
6 from a point at which the video clip was temporarily halted, and
7 responding to a user input to stop playing the video clip by stopping the
8 playing of the video clip and returning to a main part of the application
9 program.

1 31. The computer system recited in claim 30, wherein the user interface is
2 a single button which when pressed once pauses the playing of the video
3 clip if the video clip is playing, when pressed again resumes the playing of
4 the video clip if the video clip is temporarily halted, and when pressed
5 twice in succession causes the playing of the video clip to be stopped.

1 32. The computer system recited in claim 28, wherein said at least one
2 attribute of a word identified as an active hyperlink is a change in color,
3 the word on the displayed page changing color when read.

1 33. The computer system recited in claim 28, wherein said at least one
2 attribute of a word identified as an active hyperlink is a sound, the sound
3 being emitted when the word on the displayed page is read.

1 34. The computer system recited in claim 28, wherein said at least one
2 attribute of a word identified as an active hyperlink is a change in color
3 and a sound, the sound being emitted and the word on the displayed page
4 changing color when read.

1 35. The computer system recited in claim 28, wherein the voiced
2 commands which may be spoken by the user of the book and recognized
3 by the voice recognition function further include a command to list active
4 hyperlinks on a displayed page.

1 36. The computer system recited in claim 28, wherein the voiced

2 commands which may be spoken by the user of the book and recognized
3 by the voice recognition function further include a command to display an
4 image of a completed project described on a currently displayed page of
5 the book.

1 37. The computer system recited in claim 28, further comprising:
2 a system unit having a generally rectangular shape, said central
3 processing unit being housed within the system unit, wherein the display is
4 a flat panel display hinged at one edge of the system unit, said flat panel
5 display being rotated away from the system unit when the computer system
6 is in operation and rotated flat against the system unit when the computer
7 system is not in operation;
8 detecting means associated with the display for detecting when a
9 user desires to turn on the computer system and when the user wants to
10 turn off the computer system; and
11 an automatic on and off function implemented on the computer
12 system and responsive to said detecting means for turning on said
13 computer system and performing an initial program load of an operating
14 system installed on the computer system when it is detected that the
15 computer systems is to be turned on and for initiating a shut down
16 procedure of any open applications and the operating system when it that
17 the computer system is to be turned off.

1 38. The computer system recited in claim 37, wherein the computer system
2 may optionally be sat on a horizontal work surface or mounted under a
3 cabinet or shelf, the computer system further comprising orientation means
4 for detecting an orientation of the computer system as either on a
5 horizontal work surface or mounted under a cabinet or shelf, said
6 automatic on and off function being further responsive to said orientation
7 means for rotating display information to the flat panel display during the
8 initial program load of the operating system so that a display is oriented

9 right side up.

1 39. The computer system recited in claim 37, wherein the detecting means
2 detects a position of the display as either rotated away from the system unit
3 or rotated against the system unit.

1 40. The computer system recited in claim 37, wherein the display is hinged
2 along a front edge of the system unit.

1 41. The computer system recited in claim 40, further comprising a
2 protective cover hinged along a back edge of the computer system, the
3 protective cover being rotated to cover and protect the flat panel display
4 when the flat panel display is rotated flat against the system unit and
5 rotated away from the system unit to allow the flat panel display to be
6 rotated away from the system unit.

1 42. The computer system recited in claim 41, wherein the detecting means
2 is actuated by movement of the protective cover.

1 43. The computer system recited in claim 42, wherein the computer system
2 may optionally be sat on a horizontal work surface or mounted under a
3 cabinet or shelf, the computer system further comprising orientation means
4 for detecting an orientation of the computer system as either on a
5 horizontal work surface or mounted under a cabinet or shelf, said
6 automatic on and off function being further responsive to said orientation
7 means for rotating display information to the flat panel display during the
8 initial program load of the operating system so that a display is oriented
9 right side up.

1 44. The computer system recited in claim 37, further comprising a single

2 user interface button on a front surface of the system unit, the user
3 interface button allowing a user to control functions of software running on
4 the computer system by a combination of single and double presses of the
5 user interface button.

1 45. The computer system recited in claim 44, wherein the software
2 includes a multimedia presentation and the single and double presses of the
3 user interface button control pause, resume and stop functions of the
4 multimedia presentation.

1 46. The computer system recited in claim 44, wherein the software
2 presents a user with choices for making a selection in a display on the flat
3 panel display and the single and double presses of the user interface button
4 control movement among the displayed choices and selection of one of the
5 displayed choices.

1 47. The computer system recited in claim 44, further comprising a slot on
2 the front face of the computer system for receiving computer readable
3 media and an eject button for ejecting computer readable media currently
4 in the slot.

1 48. A computer system for presenting an interactive multimedia book to a
2 user comprising:
3 a display for displaying text and video clips of the interactive
4 multimedia book, some words of the text being hyperlinks to anchors in
5 text not currently displayed;
6 a voice recognition function installed on the computer system;
7 a speech synthesis function installed on the computer system;
8 a microphone for inputting voiced commands by the user to the
9 voice recognition function;
10 at least one speaker for outputting synthesized speech from the

11 speech synthesis function;
12 a last in, first out register; and
13 an application program running on a central processing unit of the
14 computer system for responding to a voiced hyperlink recognized by the
15 voice recognition function by first storing a current page number in the last
16 in, first out register before moving to another page of the book which
17 contains an anchor for the hyperlink, the current page being an origin page,
18 and then moving to another page of the book which contains the anchor for
19 the hyperlink, said application program responding to a voiced command
20 recognized by the voice recognition function to return to the origin page by
21 moving back to the origin page.

1 49. The computer system recited in claim 48, wherein said voice
2 recognition function recognizes a natural language query spoken by the
3 user of the book by analyzing the natural language query and responding to
4 the natural language query.

1 50. The computer system recited in claim 49, wherein the natural language
2 query includes "WHAT", the analysis of the natural language query by the
3 voice recognition function analyzing a word or words following the word
4 "WHAT" and responding to the natural language query by displaying on
5 the display and causing the speech synthesis function to speak a definition
6 of the word or words following the word "WHAT".

1 51. The computer system recited in claim 49, wherein the natural language
2 query includes "MAKE", the analysis of the natural language query by the
3 voice recognition function analyzing a word or words following the word
4 "MAKE" and responding to the natural language query by moving to a
5 section of the book which covers a project or recipe corresponding to the
6 word or words following the word "MAKE".

1 52. The computer system recited in claim 49, wherein the natural language
2 query includes "HOW", the analysis of the natural language query by the
3 voice recognition function analyzing a word or words following the word
4 "HOW" and responding to the natural language query includes by moving
5 to a section of the book which covers a technique corresponding to the
6 word or words following the word "HOW".

1 53. The computer system recited in claim 49, wherein the natural language
2 query includes "GO", the analysis of the natural language query by the
3 voice recognition function analyzing a word or words following the word
4 "GO" and responding to the natural language query by moving to a page or
5 a section of the book which covers a project or recipe or a technique
6 corresponding to the word or words following the word "GO".

1 54. A machine readable medium containing computer code for presenting
2 an interactive multimedia book on a computer, the computer code
3 performing the steps of:
4 recognizing voiced commands spoken by a user of the book;
5 responding to a voiced command to read text on a displayed page
6 of the book by reading text on the displayed page of the book;
7 identifying words which are active hyperlinks in the text on a
8 displayed page of the book as the text is being read;
9 activating at least one attribute of a word identified as an active
10 hyperlink to indicate to the user of the book that the word is a hyperlink;
11 recognizing a voiced word spoken by the user of the book as an
12 active hyperlink; and
13 responding to a voiced word which is an active hyperlink by
14 moving to another page of the book which contains an anchor for the
15 hyperlink.

1 55. The machine readable medium containing computer code for

2 presenting an interactive multimedia book on a computer system recited in
3 claim 54, the computer code further performing the steps of:
4 displaying an icon representative of a video clip on the page of the
5 book which contains an anchor for the hyperlink;
6 recognizing a voiced command to play the video clip; and
7 responding to the voiced command to play the video clip by
8 playing the video clip.

1 56. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 55, the computer code further performing the steps of:
4 providing a user interface which allows the user to pause, resume
5 and stop the playing of the video clip;
6 responding to a user input to pause the video clip by temporarily
7 halting the playing of the video clip;
8 responding to a user input to resume playing the video clip by
9 playing the video clip from a point at which the video clip was temporarily
10 halted; and
11 responding to a user input to stop playing the video clip by
12 stopping the playing of the video clip and returning to a main program.

1 57. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 56, wherein the code that performs the step of providing a user
4 interface responds to a single button which when pressed once pauses the
5 playing of the video clip if the video clip is playing, when pressed again
6 resumes the playing of the video clip if the video clip is temporarily halted,
7 and when pressed twice in succession causes the playing of the video clip
8 to be stopped.

1 58. The machine readable medium containing computer code for

2 presenting an interactive multimedia book on a computer system recited in
3 claim 54, wherein said at least one attribute of a word identified as an
4 active hyperlink is implemented in code as a change in color, the word on
5 the displayed page changing color when read.

1 59. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 54, wherein said at least one attribute of a word identified as an
4 active hyperlink is implemented in code as a sound, the sound being
5 emitted when the word on the displayed page is read.

1 60. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 54, wherein said at least one attribute of a word identified as an
4 active hyperlink is implemented in code as a change in color and a sound,
5 the sound being emitted and the word on the displayed page changing
6 color when read.

1 61. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 54, wherein the code further implements the steps of:
4 storing a current page number in a last in, first out register before
5 moving to another page of the book which contains an anchor for the
6 hyperlink, the current page being the origin page;
7 recognizing a voiced command spoken by the user of the book to
8 return to the origin page; and
9 responding to the voiced command to return to the origin page by
10 moving back to the origin page.

1 62. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in

3 claim 54, wherein the code further implements the steps of:
4 recognizing a natural language query spoken by the user of the
5 book;
6 analyzing the natural language query; and
7 responding to the natural language query.

1 63. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the natural language query includes "WHAT", the code
4 implementing the step of analyzing the natural language query analyzing a
5 word or words following the word "WHAT", and the code implementing
6 the step of responding to the natural language query displays and speaks a
7 definition of the word or words following the word "WHAT".

1 64. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the natural language query includes "MAKE", the code
4 implementing the step of analyzing the natural language query analyzing a
5 word or words following the word "MAKE", and the code implementing
6 the step of responding to the natural language query moves to a section of
7 the book which covers a project or recipe corresponding to the word or
8 words following the word "MAKE".

1 65. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the natural language query includes "HOW", the code
4 implementing the step of analyzing the natural language query analyzing a
5 word or words following the word "HOW", and the code implementing the
6 step of responding to the natural language query moves to a section of the
7 book which covers a technique corresponding to the word or words
8 following the word "HOW".

1 66. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the natural language query includes “GO”, the code
4 implementing the step of analyzing the natural language query analyzing a
5 word or words following the word “GO”, and the code implementing the
6 step of responding to the natural language query moves to a page or a
7 section of the book which covers a project or recipe or a technique
8 corresponding to the word or words following the word “GO”.

1 67. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the voiced commands spoken by the user of the book
4 and recognized by the code further include a command to list active
5 hyperlinks on a displayed page.

1 68. The machine readable medium containing computer code for
2 presenting an interactive multimedia book on a computer system recited in
3 claim 62, wherein the voiced commands spoken by the user of the book
4 and recognized by the code further include a command to display an image
5 of a completed project described on a currently displayed page of the book.